

XX CC The invention relates to a novel human G-coupled receptor (I). (I) and
CC its corresponding polynucleotides are useful for diagnosing, treating or
CC preventing cell proliferative diseases (e.g. lymphoma, leukaemia, breast
CC cancer or cirrhosis), neurological disorders (e.g. stroke, Alzheimer's
CC disease, multiple sclerosis or mental retardation), cardiovascular
CC diseases (e.g. atherosclerosis, angina pectoris or congestive heart
CC failure), gastrointestinal disorders (e.g. dysphagia, indigestion or
CC gastritis), autoimmune/inflammatory disorders (e.g. AIDS, Crohn's disease
CC or systemic lupus erythematosus) or metabolic disorders (e.g. diabetes or
CC obesity), or viral infections (e.g. infection by herpesvirus or
CC parvovirus). AAU80493-AAU80515 represent novel human G-coupled receptor
CC amino acid sequences of the invention
XX XX
XX Sequence 321 AA;
Query Match 96.0%; Score 1649; DB 5; Length 321;
Best Local Similarity 98.8%; Pred. No. 2.8e-173;
Matches 317; Conservative 1; Mismatches 3; Indels 0; Gaps 0;
QY 9 MESPHHTDVPDSVFFLLGIPGLEQFHLWLSLPCVGLGTATVGNITILVVATEPVLHKP 68
Db 1 MESPHHTDVPDSVFFLLGIPGLEQFHLWLSLPCVGLGTATVGNITILVVATEPVLHKP 60
QY 69 VYFLCMLSTIDLAASVSTVPKLLAI FWCAGHISASACLAHMFPIHAFCMESTVLLAM 128
Db 61 VYFLCMLSTIDLAASVSTVPKLLAI FWCAGHISASACLAHMFPIHAFCMESTVLLAM 120
QY 129 AFDRYVAICHPLRYATILDTTIIAHIGVAAVVRGSLMLPCPFFIGRLNFCQSHVILHTY 188
Db 121 AFDRYVAICHPLRYATILDTTIIAHIGVAAVVRGSLMLPCPFFIGRLNFCQSHVILHTY 180
QY 189 CEHMAVVKLAGDTRPNRVYGLTAALIVIGDLCIGLSYALIAQAVRLSSHEARSKAL 248
Db 181 CEHMAVVKLAGDTRPNRVYGLTAALIVIGDLCIGLSYALIAQAVRLSSHEARSKAL 240
QY 249 GTCGSHVCVILISYTPALFSPFTHRGHHVPHIHLANVYLLPPALNPVYGVKTKQ 308
Db 241 GTCGSHVCVILISYTPALFSPFTHRGHHVPHIHLANVYLLPPALNPVYGVKTKQ 300
QY 309 IRKRVVRVFOGQGMGIKASE 329
Db 301 IRKRVVRVFOGQGMGIKASE 321
RESULT 10
AAU95725
ID AAU95725 standard; protein; 321 AA.
XX AC AAU95725;
XX AC AAU95725;
DT 02-JUN-2002 (first entry)
XX DE Human olfactory and pheromone G protein-coupled receptor #212.
XX KW Human: olfactory and pheromone G protein coupled; receptor; GPCR;
KW tranquilizer; antidepressant; neuroleptic; endocrine; anabolic;
KW anorectic; taste; fragrance; food additive; cosmetic; cell migration;
KW sterility; psychotic disorder; neurological disorder; anxiety;
KW schizophrenia; manic depression; depression; axonal growth;
KW menstrual cycle; appetite sexual motivation; sexual attraction;
KW aggression.
XX OS Homo sapiens.
XX XX WO200224726-A2.
XX FN 28-MAR-2002.
XX PD 21-SEP-2001; 2001WO-BE000162.
XX XX 22-SEP-2000; 2000EP-00870211.
XX PR

(CHEM-) CHEMCOM SA.
XX Veithen A;
XX WPI; 2002-330013/36.
DR N-PSDB; ABK68612.
XX Novel pheromone G-protein coupled receptor and receptor-derived agonists,
PT antagonists or inhibitors useful in food or cosmetic products or in the
PT treatment or prevention of neurological disorders such as anxiety and
XX schizophrenia.
PS Disclosure; Page 647-648; 833pp; English.
XX The invention relates to olfactory and Pheromone G-protein coupled
CC receptor (GPCR) or a protein 95% identical to the GPCR, a specific active
CC portion and its encoding polynucleotide. Also included are an agonist,
CC antagonist or inhibitor of the GPCR or the polynucleotide, a vector,
CC comprising the polynucleotide, a cell transformed by the vector, a non-
CC human mammal comprising a partial or total deletion of the polynucleotide
CC encoding the receptor and screening (detection and possibly, recovering)
CC of compounds which are known or not known to be agonist, antagonists or
CC inhibitors of natural compounds to the GPCR. The receptor-derived
CC agonists, antagonists, inhibitors or compounds are used as an
CC improvement, elimination or substitution of an existing taste and/or a
CC fragrance of (or in) the food and/or cosmetic products. They can also be
CC used in the preparation of medication in the treatment and/or prevention
CC of a mammalian disorder, such as cell migration, sterility, psychotic and
CC neurological disorders, including anxiety, schizophrenia, manic
CC depression, depression, for promoting axonal growth, nerve cell
CC connection and nerve regeneration for modulating male and female
CC endocrine functions, hormone production and the menstrual cycle, for the
CC prevention or the treatment by stimulation of several mammalian
CC behaviours, such as stimulation or suppression of appetite, sexual
CC motivation, sexual attraction, aggression and for promoting or
CC suppressing chemical communication between organisms. The present
CC sequence is a human olfactory and pheromone GPCR protein sequence
XX Sequence 321 AA;
Query Match 96.0%; Score 1649; DB 5; Length 321;
Best Local Similarity 98.8%; Pred. No. 2.8e-173;
Matches 317; Conservative 1; Mismatches 3; Indels 0; Gaps 0;
QY 9 MESPHHTDVPDSVFFLLGIPGLEQFHLWLSLPCVGLGTATVGNITILVVATEPVLHKP 68
Db 1 MESPHHTDVPDSVFFLLGIPGLEQFHLWLSLPCVGLGTATVGNITILVVATEPVLHKP 60
QY 69 VYFLCMLSTIDLAASVSTVPKLLAI FWCAGHISASACLAHMFPIHAFCMESTVLLAM 128
Db 61 VYFLCMLSTIDLAASVSTVPKLLAI FWCAGHISASACLAHMFPIHAFCMESTVLLAM 120
QY 129 AFDRYVAICHPLRYATILDTTIIAHIGVAAVVRGSLMLPCPFFIGRLNFCQSHVILHTY 188
Db 121 AFDRYVAICHPLRYATILDTTIIAHIGVAAVVRGSLMLPCPFFIGRLNFCQSHVILHTY 180
QY 189 CEHMAVVKLAGDTRPNRVYGLTAALIVIGDLCIGLSYALIAQAVRLSSHEARSKAL 248
Db 181 CEHMAVVKLAGDTRPNRVYGLTAALIVIGDLCIGLSYALIAQAVRLSSHEARSKAL 240
QY 249 GTCGSHVCVILISYTPALFSPFTHRGHHVPHIHLANVYLLPPALNPVYGVKTKQ 308
Db 241 GTCGSHVCVILISYTPALFSPFTHRGHHVPHIHLANVYLLPPALNPVYGVKTKQ 300
QY 309 IRKRVVRVFOGQGMGIKASE 329
Db 301 IRKRVVRVFOGQGMGIKASE 321
RESULT 11
ABR01673
ID ABR01673 standard; protein; 316 AA.
XX

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Db 121 ESTVLLAMAFDRYVAICHPLRYATILTDITIAHIGVAAVVRGSLMLPCPFLIGRLNFCQ 180
QY 181 SHVILHTYCEHMAVVKLAGDTRPNRVYGLTAALLVIGVDLFCIGLSYALIAQAVLRSS 240
Db 181 SHVILHTYCEHMAVVKLAGDTRPNRVYGLTAALLVIGVDLFCIGLSYALSAQAVLRSS 240
QY 241 HEARSKALGTGCGSHVCVILLISYTPALFSPFTHRGHVPVHIILLANVYLLPPALNPV 300
Db 241 HEARSKALGTGCGSHVCVILLISYTPALFSPFTHRGHVPVHIILLANVYLLPPALNPV 300
QY 301 YGVKTKQIRKRVVRVFSQGGMGKASE 329
Db 301 YGVKTKQIRKRVVRVFSQGGMGKASE 329
RESULT 8
ID AAG71674 standard; protein; 321 AA.
XX AAG71674;
XX AC
XX DT
XX DE 30-JUL-2001 (first entry)
XX Human olfactory receptor polypeptide, SEQ ID NO: 1355.
XX Human; olfactory receptor; OR; primary scent determination;
KW secondary scent determination; polypeptide library; odour receptor;
KW scent profile; scent fingerprint; scent representation.
XX Homo sapiens.
XX WO200127158-A2.
XX PN
XX PD 19-APR-2001.
XX PF 06-OCT-2000; 2000WO-US027582.
XX PR 08-OCT-1999; 99US-0158615P.
XX PR 24-FEB-2000; 2000US-0184809P.
XX PA (DIGI-) DIGISCENTS.
XX PA (YEDA) YEDA RES & DEV CO LTD.
XX PI Bellenson J, Smith D, Lancet D, Glusman G, Fuchs T, Yanai I;
XX WPI; 2001-290713/30.
XX New polynucleotides which encode polypeptides involved in olfactory
PT sensation for identifying olfactory agonists and antagonists.
XX Claim 11; Page 838-839; 1857pp; English.
XX The present sequence is an olfactory receptor which is encoded by one of
CC a number of novel polynucleotides. The polynucleotides can be used in
CC screening for olfactory agonists and antagonists. The methods allow for
CC the determination of primary scents and the identification of the odour
CC receptors used to detect these primary scents. The methods also enable
CC determination of secondary scents and the identification of combinations
CC of odour receptors that are involved in detecting such secondary scents.
CC This enables the construction of a scent representation (also called a
CC scent fingerprint or scent profile), which may be used to re-create and
CC edit scents. Libraries of olfactory receptors are useful for determining
CC the interaction pattern of a composition with the receptors, and can be
CC used for determining differences in the olfactory faculties of different
CC individuals
XX Sequence 321 AA;

Query Match 96.0%; Score 1649; DB 4; Length 321;
Best Local Similarity 98.8%; Pred. No. 2.8e-173;
Matches 317; Conservative 1; Mismatches 3; Indels 0; Gaps 0;
9 MESPHTDVPVFFLLGIPGLEQFHLMSLPVCGLGATATVGNITILVVVATEPVVHKP 68

Db 1 MESPHTDVPVFFLLGIPGLEQFHLMSLPVCGLGATATVGNITILVVVATEPVVHKP 60
QY 69 VYLFCLMSTIDLAASVSTVPKLLAIFWCGAGHISASACLAHMFHAFCMWSTVLLAM 128
Db 61 VYLFCLMSTIDLAASVSTVPKLLAIFWCGAGHISASACLAQWFFHAFCMWSTVLLAM 120
QY 129 AFDRTVAICHPLRYATILTDITIAHIGVAAVVRGSLMLPCPFLIGRLNFCQSHVILHTY 188
Db 121 AFDRTVAICHPLRYATILTDITIAHIGVAAVVRGSLMLPCPFLIGRLNFCQSHVILHTY 180
QY 189 CEHMAVVKLAGDTRPNRVYGLTAALLVIGVDLFCIGLSYALIAQAVLRSSHEARSKAL 248
Db 181 CEHMAVVKLAGDTRPNRVYGLTAALLVIGVDLFCIGLSYALSAQAVLRSSHEARSKAL 240
QY 249 GTCGSHVCVILLISYTPALFSPFTHRGHVPVHIILLANVYLLPPALNPVYGVKTKQ 308
Db 241 GTCGSHVCVILLISYTPALFSPFTHRGHVPVHIILLANVYLLPPALNPVYGVKTKQ 300
QY 309 IKRVVRVFSQGGMGKASE 329
Db 301 IKRVVRVFSQGGMGKASE 321
RESULT 9
ID AAU80511 standard; protein; 321 AA.
XX AAU80511;
XX AC
XX DT 12-MAR-2002 (first entry)
XX DE Human G-coupled receptor (GCREC) protein, Seq ID No 19.
XX Human; cytostatic; neuroprotective; immunosuppressant; nootropic;
KW anti-inflammatory; anti-viral; gastrointestinal; cardiovascular;
KW cerebroprotective; G-coupled receptor; cell proliferative disease;
KW lymphoma; leukaemia; breast cancer; cirrhosis; neurological disorder;
KW stroke; Alzheimer's disease; multiple sclerosis; mental retardation;
KW cardiovascular disease; atherosclerosis; angina pectoris; indigestion;
KW congestive heart failure; gastrointestinal disorder; dysphagia; AIDS;
KW gastritis; autoimmune disorder; inflammatory disorder; Crohn's disease;
KW systemic lupus erythematosus; metabolic disorder; diabetes; obesity;
KW viral infection; herpesvirus; parvovirus;
KW acquired immune deficiency syndrome.
XX Homo sapiens.
XX WO200190359-A2.
XX PN
XX PD 29-NOV-2001.
XX PF 22-MAY-2001; 2001WO-US016833.
XX PR 22-MAY-2000; 2000US-0206222P.
XX PR 25-MAY-2000; 2000US-0207476P.
XX PR 02-JUN-2000; 2000US-0208834P.
XX PR 07-JUN-2000; 2000US-0208861P.
XX PR 07-JUN-2000; 2000US-0209868P.
XX PA (INCY-) INCYTE GENOMICS INC.
XX PI Patterson C, Tribouley CM, Yao MG, Griffin JA, Thornton M, Lu Y;
XX PI Kallick DA, Gandhi AR, Au-Young J;
XX WPI; 2002-106199/14.
XX DR N-PSDB; ABK16633.
XX DR
XX PT New G-protein coupled receptors useful for treating or preventing cell
PT proliferative (e.g. leukemia), neurological (e.g. stroke), cardiovascular
XX or autoimmune/inflammatory disorders.
XX Claim 1; Page 133-134; 148pp; English.

Appendix B2

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Appendix 133

Db	181	SHVILHTYCEHMAVVKACGDTFPRNVYGLTAALLVIGDLCIGLSYALSAQAVLRSS	240
QY	241	HEARSKALGTCGSHVCVILLISYTPALFSPFTHRGHVPVHIHILLANVYLLPPALNPV	300
Db	241	HEARSKALGTCGSHVCVILLISYTPALFSPFTHRGHVPVHIHILLANVYLLPPALNPV	300
QY	301	VYGVKTKQIRKRVVRVFSQGGMGIKASE	329
Db	301	VYGVKTKQIRKRVVRVFSQGGMGIKASE	329
RESULT 7			
ID	ADC86345		
XX	ADC86345	standard; protein; 329 AA.	
AC	ADC86345;		
XX	XX		
DT	01-JAN-2004	(first entry)	
XX	XX		
DE	Human GPCR protein SEQ ID NO:798.		
XX	XX		
KW	human; GPCR; guanosine triphosphate-binding protein coupled receptor;		
KW	gene therapy.		
XX	XX		
OS	Homo sapiens.		
XX	XX		
FN	EP1270724-A2.		
XX	XX		
PD	02-JAN-2003.		
XX	XX		
PF	18-JUN-2002; 2002EP-00013517.		
XX	XX		
PR	18-JUN-2001; 2001JP-00246789.		
XX	XX		
PA	(NAAD-) NAT INST ADVANCED IND SCI & TECHNOLOGY.		
PA	(ADSC-) CENT ADVANCED SCI & TECHNOLOGY INCUBATIO.		
XX	XX		
PI	Suwa M, Asai K, Akiyama Y, Aburatani H;		
XX	XX		
DR	WPI; 2003-315783/31.		
DR	N-PSDB; ADC86344.		
XX	XX		
PT	New polynucleotide, useful for preparing a composition for treating a		
PT	patient in need of increased or suppressed activity or expression of the		
PT	guanosine triphosphate-binding protein coupled receptor.		
XX	XX		
PS	Claim 2; SEQ ID NO 798; 28pp; English.		
XX	XX		
CC	The invention relates to a novel polynucleotide encoding a guanosine		
CC	triphosphate-binding protein coupled receptor (GPCR). A polynucleotide of		
CC	the invention may have a use in gene therapy. The polynucleotide and		
CC	polypeptide are useful for preparing a composition for treating a patient		
CC	in need of increased or suppressed activity or expression of the		
CC	guanosine triphosphate-binding protein coupled receptor. The protein		
CC	sequences shown in ADC85549-ADC87617 represent GPCR's of the invention.		
XX	XX		
SQ	Sequence 329 AA;		
Query Match	98.4%;	Score 1691; DB 7; Length 329;	
Best Local Similarity	98.8%;	Pred. No. 6.7e-178;	
Matches 325; Conservative	1;	Mismatches 3; Indels 0; Gaps 0;	
QY	1	MSSTLGHNMESPHHTDVPSPVFFLLGIPGLEQFHLWLSLPVCGLTATVGNITILVVA	60
Db	1	MSSTLGHNMESPHHTDVPSPVFFLLGIPGLEQFHLWLSLPVCGLTATVGNITILVVA	60
QY	61	TEPVLHKPVYFLCMLSTIDLAASVSTVPKLLAIFWCGAGHISASACLAHMFHAFQW	120
Db	61	TEPVLHKPVYFLCMLSTIDLAASVSTVPKLLAIFWCGAGHISASACLAHMFHAFQW	120
QY	121	ESTVLLAMAFDRYVAICHPLRYATILTDITIAHIGVAAVVRGSLMLPCPPFGLRNFQ	180
Db	121	ESTVLLAMAFDRYVAICHPLRYATILTDITIAHIGVAAVVRGSLMLPCPPFGLRNFQ	180
QY	181	SHVILHTYCEHMAVVKACGDTFPRNVYGLTAALLVIGDLCIGLSYALSAQAVLRSS	240

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CC polynucleotide sequences shown in ADC85548-ADC87616 encode GPCR's of the
XX invention.
SQ Sequence 1390 BP; 317 A; 353 C; 293 G; 427 T; 0 U; 0 Other;
Alignment Scores:
Pred. No.: 8 03e-169 Length: 1390
Score: 1691.00 Matches: 325
Percent Similarity: 99.09% Conservatives: 1
Best Local Similarity: 98.78% Mismatches: 3
Query Match: 98.43% Indels: 0
DB: 9 Gaps: 0
US-10-081-775-2 (1-329) x ADC86344 (1-1390)
QY 1 MetSerSerThrLeuGlyHisAsnMetGluSerProHisHisThrAspValAspProSer 20
DB 201 ATGTCCAGCACTCTTGGCCACAAATGCTTCTAATACACACTGATGTTGACCCCTTCT 260
QY 21 ValPhePheLeuLeuGlyLeuProGlyLeuGluGlnPheHisLeuTrpLeuSerLeuPro 40
DB 261 GTCCTCTCCCTGGGATCCAGGCTGGAACAATTTCAATTTGTGGCTCTCACTCCCT 320
QY 41 ValCysGlyLeuGlyThrAlaThrIleValGlyAsnIleThrIleLeuValValAla 60
DB 321 GTGTGGCTTAGGCACACACCAATGTCGGCATATACTATTTCTGGTTGTGTGCC 380
QY 61 ThrGluProValLeuHisIleProValTyrLeuPheLeuCysMetLeuSerThrIleAsp 80
DB 381 ACTGAACCAAGTCTTGCCACAGCCTGTGTACCTTTTCTGTGCATGCTCTCAACCATGAC 440
QY 81 LeuAlaAlaSerValSerThrValProIleLeuAlaIlePheTrpCysGlyAlaGly 100
DB 441 TTGCTGGCTCTGCTCCACAGTCTCCCAAGCTACTGGCTATCTTCTGGTGGAGCCGGA 500
QY 101 HisIleSerAlaSerAlaCysLeuAlaHisMetPhePheIleHisAlaPheCysMetMet 120
DB 501 CATATATCGCTCTGCTGCTGGCAGATGTTCTTCATTCATGCTTCTGATGATG 560
QY 121 GluSerThrValLeuLeuAlaMetAlaPheAspArgTyrValAlaIleCysHisProLeu 140
DB 561 GAGTCCACTGTGCTACTGGCCATGCGCTTGTACGTACGTGGCCATCTGCCACCCACTC 620
QY 141 ArgTyrAlaThrIleLeuThrAspThrIleAlaHisIleGlyValAlaAlaVal 160
DB 621 CGCTATGCCAATCTCTCACTGACACCATCATGTCGCCACATAGGCGGTGGAGCTGTAGT 680
QY 161 ArgGlySerLeuLeuMetLeuProCysProPhePheIleGlyArgLeuAsnPheCysGln 180
DB 681 CGAGGCTCCCTGCTCATGCTCCCATGTCCTTCTTATTTGGCGTTGAACTTCTGCCNA 740
QY 181 SerHisValIleLeuHisThrTyrCysGluHisMetAlaValValLeuAlaCysGly 200
DB 741 AGCATGTGATCTTACACACCTACTGTGAGCACATGCTGTGTGTGAAGCTGGCCTGTGA 800
QY 201 AspThrArgProAsnArgValTyrGlyLeuThrAlaIleLeuValIleGlyValAsp 220
DB 801 GACACAGGCTACACCGTGTGTGGCTGACAGCTGACGTGTGGTCAATGGGGTTGAC 860
QY 221 LeuPheCysIleGlyLeuSerTyrAlaLeuIleAlaGlnAlaValLeuAspSerSer 240
DB 861 TTGTTTGGCATGTGCTCTCTATGCTTGTAGTGCACAGCTGTCTTCTGCTCTCAACC 920
QY 241 HisGluAlaArgSerLysAlaLeuGlyThrCysGlySerHisValCysValIleLeuIle 260
DB 921 CATGAAGCTCGTCCAGGCTTGTGGTCCCATGCTGTGTGCTCATCTCATC 980
QY 261 SerTyrThrProAlaLeuPheSerPhePheThrHisArgPheGlyHisHisValProVal 280
DB 981 TCTTATACACAGCCCTCTCTCTCTTTTATACACACCGCTTGGCCATCAGTCTCCAGTC 1040
QY 281 HisIleHisIleLeuLeuAlaAsnValTyrLeuLeuLeuProAlaLeuAsnProVal 300

DB 1041 CATATTACATCTTTTGGCAATGTTATCTGCTTTGCCACCTGCTCTTAATCCTGTG 1100
QY 301 ValTyrGlyValLysThrLysGlnIleArgLysArgValValArgValPheGlnSerGly 320
DB 1101 GTATATGGAGTTAAGACCAACACAGATCCGTAAGAAGTGTTCAGGGTGTTCAGAGTGG 1160
QY 321 GlnGlyMetGlyIleLysAlaSerGlu 329
DB 1161 CAGGGAATGGGCATCAAGGCATCTGAG 1187
RESULT 8
AAH31850
ID AAH31850 standard; DNA; 963 BP.
XX AAH31850;
AC AAH31850;
DT 30-JUL-2001 (first entry)
XX
DE Human olfactory receptor polynucleotide, SEQ ID NO: 423.
XX Human; olfactory receptor; OR; primary scent determination;
KW secondary scent determination; polypeptide library; odour receptor;
XX scent profile; scent fingerprint; scent representation; ds.
XX Homo sapiens.
OS
XX MO200127158-A2.
FN
XX 19-APR-2001.
PD
XX 06-OCT-2000; 2000MO-US027582.
PF
XX 08-OCT-1999; 99US-0158615P.
PR
XX 24-FEB-2000; 2000US-0184809P.
PS
XX (DIGI-) DIGISCENTS.
PA (YEDA) YEDA RES & DEV CO LTD.
XX
PI Bellenson J, Smith D, Lancet D, Glusman G, Fuchs T, Yanai I;
XX WPI; 2001-290713/30.
DR
XX New polynucleotides which encode polypeptides involved in olfactory
PT sensation for identifying olfactory agonists and antagonists.
PS
XX Claim 8; Page 349; 1857pp; English.
CC The present sequence is one of a number of isolated polynucleotides which
CC encode polypeptides involved in olfactory sensation. The polynucleotides
CC can be used in screening for olfactory agonists and antagonists. The
CC methods allow for the determination of primary scents and the
CC identification of the odour receptors used to detect these primary
CC scents. The methods also enable determination of secondary scents and the
CC identification of combinations of odour receptors that are involved in
CC detecting such secondary scents. This enables the construction of a scent
CC representation (also called a scent fingerprint or scent profile), which
CC may be used to re-create and edit scents. Libraries of olfactory
CC receptors are useful for determining the interaction pattern of a
CC composition with the receptors, and can be used for determining
CC differences in the olfactory faculties of different individuals
XX
SQ Sequence 963 BP; 181 A; 276 C; 216 G; 290 T; 0 U; 0 Other;
Alignment Scores:
Pred. No.: 1 13e-164 Length: 963
Score: 1649.00 Matches: 317
Percent Similarity: 99.07% Conservatives: 1
Best Local Similarity: 98.75% Mismatches: 3
Query Match: 95.98% Indels: 0
DB: 4 Gaps: 0
US-10-081-775-2 (1-329) x AAH31850 (1-963)

QY 9 MetGluSerProHisHisThrAspValAspProSerValPhePheLeuLeuGlyIlePro 28
DB 1 ATGGAATCTCTAATACACACTGATGTGACCCCTTCTGTTCTTCTCTCTGGGCAATCCCA 60
QY 29 GlyLeuGluGlnPheHisLeuTrpLeuSerLeuProValCysGlyLeuGlyThrAlaThr 48
DB 61 GGTCTGGAACAATTTCAATTTGGCTCTCACTCCCTGTGTGTGGCTTAGGCACAGCCACA 120
QY 49 IleValGlyAsnIleThrIleLeuValValAlaThrGluProValLeuHisLysPro 68
DB 121 ATGTGGGGCAATATACTATTCTGGTGTGTGTGGCACTGAACCACTCTTGCAACAGCT 180
QY 69 ValTyrLeuPheLeuCysMetLeuSerThrIleAspLeuAlaAlaSerValSerThrVal 88
DB 181 GTGTACCTTTTCTGTGATGCTCTCAACATGCACTTGGCTGCTCTGTCTCCAGTT 240
QY 89 ProLysLeuLeuAlaIlePheTrpCysGlyAlaGlyHisIleSerAlaSerAlaCysLeu 108
DB 241 CCCAAGCTACTGGCTATCTTGTGTGGAGCGGACATATATCTGCTCTGCTGCTG 300
QY 109 AlaHisMetPhePheIleHisAlaPheCysMetMetGluSerThrValLeuLeuAlaMet 128
DB 301 GCACAGATGTTCTTCAATTCATGCTTCTCATGATGGAGTCCACTGCTGCTAGTGGCAG 360
QY 129 AlaPheAspArgTyrValAlaIleCysHisProLeuArgTyrAlaThrIleLeuThrAsp 148
DB 361 GCCTTTGATCGTAGTGGCCATCTGCCACCCACTCCGCTATGCCAATCTCTCACTGAC 420
QY 149 ThrIleIleAlaHisIleGlyValAlaAlaValValArgLysLeuLeuMetLeuPro 168
DB 421 ACCATCATTTGCCACATAGGGGTGGCAGCTGTAGTGGAGGCTCCCTGCTCATGCTCCA 480
QY 169 CysProPhePheIleGlyArgLeuAsnPheCysGlnSerHisValIleLeuHisThrTyr 188
DB 481 TGTCCCTCTCTTATTGGGCGTTTGAATCTCTGCAAGCCATGTGATCTTACACAGTAC 540
QY 189 CysGluHisMetAlaValValLysLeuAlaCysGlyAspThrArgProAsnArgValTyr 208
DB 541 TGTGAGCATGCTGCTGTGAGCTGGCTGTGGAGACACAGGCTTAACCGTGTGTAT 600
QY 209 GlyLeuThrAlaAlaLeuLeuValIleGlyValAspLeuPheCysIleGlyLeuSerTyr 228
DB 601 GGGCTGACAGCTGCACTGTGTGTCATTTGGGTTGACTTGTGTTCATTTGCTCTCTCAT 660
QY 229 AlaLeuIleAlaGlnAlaValLeuArgLeuSerSerHisGlnAlaArgSerLysAlaLeu 248
DB 661 GCCCTAAGTGCAAGCTGCTCTGCTCTGCTCTATCCATGAAAGCTGGTCCAGGCCCTTA 720
QY 249 GlyThrCysGlySerHisValCysValIleLeuIleSerTyrThrProAlaLeuPheSer 268
DB 721 GGGAGCTGTGTTCCATGCTGTGTGTCATCTCTTATACACAGCCCTCTTCTCC 780
QY 269 PhePheThrHisArgPheGlyHisHisValProValHisIleHisIleLeuLeuAlaAsn 288
DB 781 TTTTATACACACCGCTTTGGCCATCAGTTCAGTCCATATTCACATCTTTTGGCCAT 840
QY 289 ValTyrLeuLeuLeuProProAlaLeuAsnProValValTyrGlyValLysThrLysGln 308
DB 841 GTTATCTGCTTTTGGCACCTGCTCTTAATCTCTGTGTATATGAGTTAAGCAACAG 900
QY 309 IleArgLysArgValValArgValPheGlnSerGlyGlnGlyMetGlyIleLysAlaSer 328
DB 901 ATCCGTAAAGAGTTGTGAGGCTGTTTCAAGTGGGCAAGGAAATGGGCAATCAAGGCATCT 960
QY 329 Glu 329
DB 961 GAG 963

RESULT 9
ABK16633
ID ABK16633 standard; cDNA; 966 BP.
XX
AC ABK16633;

XX 14-MAR-2002 (first entry)
DT Human G-coupled receptor (GCRC) cDNA, Seq ID No 42.
XX
DE Human; cytostatic; neuroprotective; immunosuppressant; nootropic;
KW anti-inflammatory; anti-viral; gastrointestinal; cardiovascular;
KW cerboprotective; G-coupled receptor; cell proliferative disease;
KW lymphoma; leukaemia; breast cancer; cirrhosis; neurological disorder;
KW stroke; Alzheimer's disease; atherosclerosis; mental retardation;
KW cardiovascular disease; atherosclerosis; angina pectoris; indigestion;
KW congestive heart failure; gastrointestinal disorder; dysphagia; AIDS;
KW gastritis; autoimmune disorder; inflammatory disorder; Crohn's disease;
KW systemic lupus erythematosus; metabolic disorder; diabetes; obesity;
KW viral infection; herpesvirus; parvovirus;
KW acquired immune deficiency syndrome; ss.
XX Homo sapiens.
OS
XX WO200190359-A2.
XX 29-NOV-2001.
XX 22-MAY-2001; 2001WO-US016833.
XX 22-MAY-2000; 2000US-0206222P.
PR 25-MAY-2000; 2000US-0207476P.
PR 02-JUN-2000; 2000US-0208834P.
PR 02-JUN-2000; 2000US-0208861P.
PR 07-JUN-2000; 2000US-0209868P.
XX (INCY-) INCYTE GENOMICS INC.
XX Patterson C, Tribouley CM, Yao MG, Griffin JA, Thornton M, Lu Y;
PI Kallick DA, Gandhi AR, Au-Young J;
XX
DR WPI: 2002-106199/14.
DR P-PSDB; AA080511.
XX
PT New G-protein coupled receptors useful for treating or preventing cell
PT proliferative (e.g. leukemia), neurological (e.g. stroke), cardiovascular
PT or autoimmune/inflammatory disorders.
XX
PS Claim 5; Page 146; 148pp; English.
XX
CC The invention relates to a novel human G-coupled receptor (I). (I) and
CC its corresponding polynucleotides are useful for diagnosing, treating or
CC preventing cell proliferative diseases (e.g. lymphoma, leukaemia, breast
CC cancer or cirrhosis), neurological disorders (e.g. stroke, Alzheimer's
CC disease, multiple sclerosis or mental retardation), cardiovascular
CC diseases (e.g. atherosclerosis, angina pectoris or congestive heart
CC failure), gastrointestinal disorders (e.g. dysphagia, indigestion or
CC gastritis), autoimmune/inflammatory disorders (e.g. AIDS, Crohn's disease
CC or systemic lupus erythematosus) or metabolic disorders (e.g. diabetes or
CC obesity), or viral infections (e.g. infection by herpesvirus or
CC parvovirus). ABK16633-ABK16637 represent novel human G-coupled receptor
CC coding sequences of the invention
XX
SQ Sequence 966 BP; 182 A; 276 C; 217 G; 291 T; 0 U; 0 Other;

Alignment Scores:
Pred. No.: 1.34e-164 Length: 966
Score: 1649.00 Matches: 317
Percent Similarity: 99.07% Conservative: 1
Best Local Similarity: 98.75% Mismatches: 3
Query Match: 95.98% Indels: 0
DB: Gaps: 0

US-10-081-775-2 (1-329) x ABK16633 (1-966)

QY 9 MetGluSerProHisHisThrAspValAspProSerValPhePheLeuLeuGlyIlePro 28
DB 1 ATGGAATCTCTAATACACACTGATGTGACCCCTTCTGTTCTTCTCTCTGGGCAATCCCA 60

Appendix B7

Human G protein coupled receptor coding sequence SEQ ID 205.
Human; gene; anorectic; antiasthmatic; antidiabetic; hypotensive;
anti-parkinsonian; nootropic; neuroprotective; tranquiliser;
anti-rheumatic; anti-inflammatory; osteopathic; cardiast; neuroleptic;
anti-arthritis; gene therapy; olfactory G protein-coupled receptor; GPCR;
infection; obesity; diabetes; hypertension; malnutrition;
Parkinson's disease; Alzheimer's disease; Korsakoff's psychosis; anxiety;
rheumatoid arthritis; chronic obstructive pulmonary disease;
osteoporosis; asthma; myocardial infarction; schizophrenia;
osteoarthritis; ds.

Homo sapiens.
WO2003000735-A2.
03-JAN-2003.
24-JUN-2002; 2002WO-IB002481.
26-JUN-2001; 2001US-0301095P.
06-NOV-2001; 2001US-0332758P.
(DECO-) DECODE GENETICS EHF.

Martinez RAM, Sigurdsson GT;
WPI; 2003-175284/17.
P-PSDB; ABR01673.

New olfactory G protein-coupled receptor gene nucleic acid and
polypeptide, useful for diagnosing or treating a disease or condition
associated with GPCR, e.g. obesity, diabetes, hypertension, malnutrition
or Alzheimer's disease.

Claim 1; Page 103; 383pp; English.

The present invention relates to novel human olfactory G protein-coupled
receptors (GPCR) and their coding sequences (ABZ77974-ABZ77986 and
ABR01571-ABR01685). The GPCRs and coding sequences are useful for
diagnosing or treating a disease or condition associated with GPCR, e.g.
infections, obesity, diabetes, hypertension, malnutrition, Parkinson's
disease, Alzheimer's disease, Korsakoff's psychosis, anxiety, rheumatoid
arthritis, chronic obstructive pulmonary disease, osteoporosis, asthma,
myocardial infarction, schizophrenia, or osteoarthritis

Sequence 948 BP; 174 A; 266 C; 202 G; 306 T; 0 U; 0 Other;

Alignment Scores:
Pred. No.: 1.0le-135 Length: 948
Score: 1376.00 Matches: 267
Percent Similarity: 94.16% Conservative: 7
Best Local Similarity: 91.75% Mismatches: 17
Query Match: 80.09% Indels: 0
DB: Gaps: 0

US-10-081-775-2 (1-329) x ABZ77974 (1-948)

QY 20 SerValPhePheLeuLeuGlyIleProGlyLeuGluGlnPheHisLeuTrpLeuSerLeu 39
Db 28 TCTGAGTTTATCTCTGATGGATTCCTGGCAATATGAGCAATATACTATTCTGGTTGTTT 87
QY 40 ProValCysGlyLeuGlyThrAlaThrIleValGlyAsnIleThrIleLeuValValVal 59
Db 88 TTGTTGTTGTTGTTGTTGTTGTTGTTGTTGTTGTTGTTGTTGTTGTTGTTGTTGTTGTT 147
QY 60 AlaThrGluProValLeuHisLysProValTyrLeuPheLeuCysMetLeuSerThrIle 79
Db 148 GCCACTGAACAGCTCTTGACCAAGCTGTGTACCTTTTCTGTGCATGCTCTCAACATC 207
QY 80 AspLeuAlaAlaSerValSerThrValProLysLeuLeuAlaIlePheTrpCysGlyAla 99
Db 208 GACTTGGTGCCTCTCTCTCCAGTTCACAGTCTACTGCTATCTCTGCTGTGGAGCC 267

DE XX Human G protein coupled receptor coding sequence SEQ ID 205.
KW XX Human; gene; anorectic; antiasthmatic; antidiabetic; hypotensive;
KW XX anti-parkinsonian; nootropic; neuroprotective; tranquiliser;
KW XX anti-rheumatic; anti-inflammatory; osteopathic; cardiast; neuroleptic;
KW XX anti-arthritis; gene therapy; olfactory G protein-coupled receptor; GPCR;
KW XX infection; obesity; diabetes; hypertension; malnutrition;
KW XX Parkinson's disease; Alzheimer's disease; Korsakoff's psychosis; anxiety;
KW XX rheumatoid arthritis; chronic obstructive pulmonary disease;
KW XX osteoporosis; asthma; myocardial infarction; schizophrenia;
KW XX osteoarthritis; ds.
OS XX Homo sapiens.
XX XX WO2003000735-A2.
XX XX 03-JAN-2003.
XX XX 24-JUN-2002; 2002WO-IB002481.
XX XX 26-JUN-2001; 2001US-0301095P.
XX XX 06-NOV-2001; 2001US-0332758P.
XX XX (DECO-) DECODE GENETICS EHF.
XX XX Martinez RAM, Sigurdsson GT;
XX XX WPI; 2003-175284/17.
XX XX P-PSDB; ABR01673.
XX XX New olfactory G protein-coupled receptor gene nucleic acid and
XX XX polypeptide, useful for diagnosing or treating a disease or condition
XX XX associated with GPCR, e.g. obesity, diabetes, hypertension, malnutrition
XX XX or Alzheimer's disease.
XX XX Claim 1; Page 103; 383pp; English.
XX XX The present invention relates to novel human olfactory G protein-coupled
XX XX receptors (GPCR) and their coding sequences (ABZ77974-ABZ77986 and
XX XX ABR01571-ABR01685). The GPCRs and coding sequences are useful for
XX XX diagnosing or treating a disease or condition associated with GPCR, e.g.
XX XX infections, obesity, diabetes, hypertension, malnutrition, Parkinson's
XX XX disease, Alzheimer's disease, Korsakoff's psychosis, anxiety, rheumatoid
XX XX arthritis, chronic obstructive pulmonary disease, osteoporosis, asthma,
XX XX myocardial infarction, schizophrenia, or osteoarthritis
XX XX
SQ Sequence 948 BP; 174 A; 266 C; 202 G; 306 T; 0 U; 0 Other;
Alignment Scores:
Pred. No.: 1.0le-135 Length: 948
Score: 1376.00 Matches: 267
Percent Similarity: 94.16% Conservative: 7
Best Local Similarity: 91.75% Mismatches: 17
Query Match: 80.09% Indels: 0
DB: Gaps: 0
US-10-081-775-2 (1-329) x ABZ77974 (1-948)
QY 20 SerValPhePheLeuLeuGlyIleProGlyLeuGluGlnPheHisLeuTrpLeuSerLeu 39
Db 28 TCTGAGTTTATCTCTGATGGATTCCTGGCAATATGAGCAATATACTATTCTGGTTGTTT 87
QY 40 ProValCysGlyLeuGlyThrAlaThrIleValGlyAsnIleThrIleLeuValValVal 59
Db 88 TTGTTGTTGTTGTTGTTGTTGTTGTTGTTGTTGTTGTTGTTGTTGTTGTTGTTGTTGTT 147
QY 60 AlaThrGluProValLeuHisLysProValTyrLeuPheLeuCysMetLeuSerThrIle 79
Db 148 GCCACTGAACAGCTCTTGACCAAGCTGTGTACCTTTTCTGTGCATGCTCTCAACATC 207
QY 80 AspLeuAlaAlaSerValSerThrValProLysLeuLeuAlaIlePheTrpCysGlyAla 99
Db 208 GACTTGGTGCCTCTCTCTCCAGTTCACAGTCTACTGCTATCTCTGCTGTGGAGCC 267

29 GlyLeuGluGlnPheHisLeuTrpLeuSerLeuProValCysGlyLeuGlyThrAlaThr 48
61 GGTCTGGAACATTTCAITTTGGCTCTCACTCCCTGTGTGGCTTAGGCACGCCACA 120
49 IleValGlyAsnIleThrIleLeuValValAlaThrGluProValLeuHisLysPro 68
121 ATTGTGGCAATATACTATTCTGTTGTTGTTGTTGTTGTTGTTGTTGTTGTTGTTGTTGTT 180
69 ValTyrLeuPheLeuCysMetLeuSerThrIleAspLeuAlaAlaSerValSerThrVal 88
181 GTGTACCTTTTCTGTGTGATGCTCTCAACCATCGACTTGGCTGCTGTCTCTCCACAGTT 240
89 ProLysLeuLeuAlaIlePheTrpCysGlyAlaGlyHisIleSerAlaSerAlaCysLeu 108
241 CCCAAGCTACTGGCTATCTTCTGTGTGGAGCCGACATATATCTGCTCTGCTGCTGCTG 300
109 AlaHisMetPhePheIleHisAlaPheCysMetMetGluSerThrValLeuLeuAlaMet 128
301 GCACAGATGTTCTTCAITTCATGCTTCTGATGATGAGTCCACTGTCTACTGGCCATG 360
129 AlaPheAspArgTyrValAlaIleCysHisProLeuArgTyrAlaThrIleLeuThrAsp 148
361 GCCTTTGATGCTACGTGCGCATCTGCCACCATCTCCGCTATGCCACAATCTCTCACTGAC 420
149 ThrIleAlaHisIleGlyValAlaAlaValArgGlySerLeuLeuMetLeuPro 168
421 ACCATCATGCCCACATAGGGTGGAGCTGTAGTGGAGGCTTCTGCTCTGCTCTGCTCCA 480
169 CysProPhePheIleGlyArgLeuAsnPheCysGlnSerHisValIleLeuHisThrTyr 188
481 TGTCCCTTCTTATTGGCGTTTGAATCTTCTGCCAAGCCATGTGATCTTACACAGTAC 540
189 CysGluHisMetAlaValValLysLeuAlaCysGlyAspThrArgProAsnArgValTyr 208
541 TGTGAGCACATGGCTGTGGTGAAGCTGGCCCTGTGGAGACACACAGCCCTTAACCGTGTAT 600
209 GlyLeuThrAlaAlaLeuValIleGlyValAlaPheLeuPheCysIleGlyLeuSerTyr 228
601 GGGCTGACAGCTGACCTGTGGTCAITTTGGGTTGACTTGTGTTGTTGTTGTTGTTGTTGTT 660
229 AlaLeuLeuAlaGlnAlaValLeuArgLeuSerSerHisGluAlaArgSerLysAlaLeu 248
661 GCCCTAAGTGACCAAGCTGCTTCTGCTCTCTCATCCCATGAAGCTCGGTCCAGGCCCTA 720
249 GlyThrCysGlySerHisValCysValIleLeuLeuSerTyrThrProAlaLeuPheSer 268
721 GGGACCTGTGTTCCCATGCTGTGTATCTCTATCTCTATATACACAGCCCTCTCTCTCC 780
269 PhePheThrHisArgPheGlyHisValProValHisIleHisIleLeuLeuAlaAsn 288
781 TTTTATACACACCGCTTTGGCCATCAGTTCAGTCCATATTCATATTCATTTTGGCCAAT 840
289 ValTyrLeuLeuLeuProProAlaLeuAsnProValValTyrGlyValLysThrLysGln 308
841 GTTATCTGCTTTTGGCACCTGCTTAACTCTGTGTATATGAGTTAGACCAACACAG 900
309 IleArgLysArgValValArgValPheGlnSerGlyGlnGlyMetGlyIleLysAlaSer 328
901 ATCCGTAAGAGAGTTGTGCGGTGTTTCAAAGTGGCGAGGAATGGGCATCAAGGCATCT 960
329 Glu 329
961 GAG 963

ABZ77974 standard; DNA; 948 BP.
ABZ77974; (first entry)